```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:sssptau153cxa

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  JAN 27   Source of Registration (SR) information in REGISTRY updated
                   and searchable
 NEWS  4  JAN 27   A new search aid, the Company Name Thesaurus, available in
                   CA/CAplus
 NEWS  5  FEB 05   German (DE) application and patent publication number format
                   changes
 NEWS  6  MAR 03   MEDLINE and LMEDLINE reloaded
 NEWS  7  MAR 03   MEDLINE file segment of TOXCENTER reloaded
 NEWS  8  MAR 03   FRANCEPAT now available on STN
 NEWS  9  MAR 29   Pharmaceutical Substances (PS) now available on STN
 NEWS 10  MAR 29   WPIFV now available on STN
 NEWS 11  MAR 29   No connect hour charges in WPIFV until May 1, 2004
 NEWS 12  MAR 29   New monthly current-awareness alert (SDI) frequency in RAPRA
 NEWS 13  APR 26   PROMT: New display field available
 NEWS 14  APR 26   FIPAT/IFIUDB/IFICDB: New super search and display field
                   available
 NEWS 15  APR 26   LITALERT now available on STN
 NEWS 16  APR 27   NLDB: New search and display fields available

 NEWS EXPRESS  MARCH 31 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 13 APRIL 2004
 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 18:39:07 ON 27 APR 2004

=> file caplus uspatful europatful japio medline biosis embase
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21
```

```
FILE 'CAPLUS' ENTERED AT 18:39:32 ON 27 APR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 18:39:32 ON 27 APR 2004
CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'EUROPATFULL' ENTERED AT 18:39:32 ON 27 APR 2004
COPYRIGHT (c) 2004 WILA Verlag Muenchen (WILA)

FILE 'JAPIO' ENTERED AT 18:39:32 ON 27 APR 2004
COPYRIGHT (C) 2004 Japanese Patent Office (JPO)- JAPIO

FILE 'MEDLINE' ENTERED AT 18:39:32 ON 27 APR 2004

FILE 'BIOSIS' ENTERED AT 18:39:32 ON 27 APR 2004
COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'EMBASE' ENTERED AT 18:39:32 ON 27 APR 2004
COPYRIGHT (C) 2004 Elsevier Inc. All rights reserved.

=> s inhal? and (powder? or partic?)
L1       96645 INHAL? AND (POWDER? OR PARTIC?)

=> s l1 and (betamimetic? or anticholinergic? or corticosteroid? or (dopamine
agonist#))
L2        8923 L1 AND (BETAMIMETIC? OR ANTICHOLINERGIC? OR CORTICOSTEROID? OR
               (DOPAMINE AGONIST#))

=> s l2 and (particle size)
L3        1607 L2 AND (PARTICLE SIZE)

=> s l3 and tiotropium
L4         120 L3 AND TIOTROPIUM

=> s l4 and (monsaccharide# or disaccharide# or oligosaccharide# or polysaccharide#
or polyols or polyalcohols)
L5          56 L4 AND (MONSACCHARIDE# OR DISACCHARIDE# OR OLIGOSACCHARIDE# OR
               POLYSACCHARIDE# OR POLYOLS OR POLYALCOHOLS)

=> s l4 and (monosaccharide# or disaccharide# or oligosaccharide# or
polysaccharide# or polyols or polyalcohols)
L6          56 L4 AND (MONOSACCHARIDE# OR DISACCHARIDE# OR OLIGOSACCHARIDE#
               OR POLYSACCHARIDE# OR POLYOLS OR POLYALCOHOLS)

=> s l6 and (excipient particles)
L7           1 L6 AND (EXCIPIENT PARTICLES)

=> d l7 1 ibib aba
'ABA' IS NOT A VALID FORMAT FOR FILE 'USPATFULL'

The following are valid formats:

The default display format is STD.

ABS -------- AB
ALL -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD,
             RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL,
             DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL,
             INCLM, INCLS, NCL, NCLM, NCLS, IC, ICM, ICS,
             EXF, ARTU
ALLG ------- ALL plus PAGE.DRAW
BIB -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD, RLI,
```

```
            PRAI, DT, FS, EXNAM, LREP, CLMN, ECL, DRWN, LN.CNT
BIB.EX ----- BIB for original and latest publication
BIBG ------- BIB plus PAGE.DRAW
BROWSE ----- See "HELP BROWSE" or "HELP DISPLAY BROWSE".  BROWSE must
            entered on the same line as DISPLAY, e.g., D BROWSE.
CAS -------- OS, CC, SX, ST, IT
CBIB ------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PRAI, DT, FS
DALL ------- ALL, delimited for post-processing
FP --------- PI, TI, IN, INA, PA, PAA, PAT, PTERM, DCD, AI, RLI,
            PRAI, IC, ICM, ICS, INCL, INCLM, INCLS, NCL,
            NCLM, NCLS, EXF, REP, REN, ARTU, EXNAM, LREP,
            CLMN, DRWN, AB
FP.EX ------ FP for original and latest publication
FPALL ------ PI, TI, IN, INA, PA, PAA, PAT, PETRM, DCD, AI,
            RLI, PRAI, IC, ICM, ICS, INCL, INCLM, INCLS, NCL, NCLM,
            NCLS, EXF, REP, REN,ARTU, EXNAM, LREP, CLMN, DRWN, AB,
            PARN, SUMM, DRWD, DETD, CLM
FPBIB ------ PI, TI, IN, INA, PA, PAA, PAT, PTERM, DCD, AI,
            RLI, PRAI, REP, REN, EXNAM, LREP, CLM, CLMN, DRWN
FHITSTR ---- HIT RN, its text modification, its CA index name, and
            its structure diagram
FPG -------- FP plus PAGE.DRAW
GI --------- PN and page image numbers
HIT -------- All fields containing hit terms
HITRN ------ HIT RN and its text modification
HITSTR ----- HIT RN, its text modification, its CA index name, and
            its structure diagram
IABS ------- ABS, indented with text labels
IALL ------- ALL, indented with text labels
IALLG ------ IALL plus PAGE.DRAW
IBIB ------- BIB, indented with text labels
IBIB.EX ---- IBIB for original and latest publication
IBIBG ------ IBIB plus PAGE.DRAW
IMAX ------- MAX, indented with text labels
IMAX.EX ---- IMAX for original and latest publication
IND -------- INCL, INCLM, INCLS, NCL, NCLM, NCLS, IC, ICM, ICS,
            EXF, ARTU, OS, CC, SX, ST, IT
ISTD ------- STD, indented with text labels
KWIC ------- All hit terms plus 20 words on either side
MAX -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, PTERM, DCD,
            RLI, PRAI, DT, FS, REP, REN, EXNAM, LREP, CLMN, ECL,
            DRWN, AB, GOVI, PARN, SUMM, DRWD, DETD, CLM, INCL,
            INCLM, INCLS, NCL, NCLM, NCLS, IC, ICM, ICS,
            EXF, ARTU OS, CC, SX, ST, IT
MAX.EX ----- MAX for original and latest publication
OCC -------- List of display fields containing hit terms
SBIB ------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, RLI, PRAI,
            DT, FS, LN.CNT
SCAN ------- AN, TI, NCL, NCLM, NCLS, IC, ICM, ICS (random display
            without answer number.  SCAN must be entered on the
            same line as DISPLAY, e.g., D SCAN)
STD -------- AN, TI, IN, INA, PA, PAA, PAT, PI, AI, RLI, PRAI,
            DT, FS, LN.CNT, INCL, INCLM, INCLS, NCL, NCLM, NCLS,
            IC, ICM, ICS, EXF (STD is the default)
STD.EX ----- STD for original and latest publication
TRIAL ------ AN, TI, INCL, INCLM, INCLS, NCL, NCLM, NCLS, IC,
            ICM, ICS

ENTER DISPLAY FORMAT (STD):abs

L7   ANSWER 1 OF 1  USPATFULL on STN
AB      A combination of therapeutic agents useful in the treatment of
        obstructive airways and other inflammatory diseases comprising (i) an
        adenosine A.sub.2A receptor agonist; and (ii) an anti-cholinergic agent,
```

preferably comprising a member selected from the group consisting of **tiotropium** and derivatives thereof; the combination being therapeutically effective in the treatment of the diseases when administered by **inhalation**; as well as to a method of treating the obstructive airways and other inflammatory diseases comprising administering separately, simultaneously or sequentially to the mammal by **inhalation** a therapeutically effective amount of the combination of therapeutic agents; as well as to a pharmaceutical composition comprising a pharmaceutically acceptable carrier together with the combination of therapeutic agents; as well as to a product containing the compounds of the combination for separate, simultaneous or sequential administration by **inhalation** to a mammal for the treatment of obstructive airways and other inflammatory diseases. It is preferred that the anti-cholinergic agent component be **tiotropium** bromide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d l7 ibib

L7 ANSWER 1 OF 1 USPATFULL on STN

ACCESSION NUMBER:	2003:17922 USPATFULL
TITLE:	Combination of an adenosine A2A-receptor agonist and **tiotropium** or a derivative thereof for treating obstructive airways and other inflammatory diseases
INVENTOR(S):	Yeadon, Michael, Sandwich, UNITED KINGDOM Watson, John W., Ledyard, CT, UNITED STATES Armstrong, Roison Anne, Mystic, CT, UNITED STATES
PATENT ASSIGNEE(S):	Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2003013675	A1	20030116	
APPLICATION INFO.:	US 2002-154561	A1	20020524	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-293530P	20010525 (60)
	US 2001-303934P	20010709 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS:	42
EXEMPLARY CLAIM:	1
LINE COUNT:	4413

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 18:39:07 ON 27 APR 2004)

FILE 'CAPLUS, USPATFULL, EUROPATFULL, JAPIO, MEDLINE, BIOSIS, EMBASE' ENTERED AT 18:39:32 ON 27 APR 2004

```
L1        96645 S INHAL? AND (POWDER? OR PARTIC?)
L2         8923 S L1 AND (BETAMIMETIC? OR ANTICHOLINERGIC? OR CORTICOSTEROID? O
L3         1607 S L2 AND (PARTICLE SIZE)
L4          120 S L3 AND TIOTROPIUM
L5           56 S L4 AND (MONSACCHARIDE# OR DISACCHARIDE# OR OLIGOSACCHARIDE#
L6           56 S L4 AND (MONOSACCHARIDE# OR DISACCHARIDE# OR OLIGOSACCHARIDE#
L7            1 S L6 AND (EXCIPIENT PARTICLES)
```

```
=> s l6 and (bioactive particle)
L8            0 L6 AND (BIOACTIVE PARTICLE)

=> s l6 and (bioactive particles)
L9            0 L6 AND (BIOACTIVE PARTICLES)

=> s l6 and (active particles)
L10           0 L6 AND (ACTIVE PARTICLES)

=> s l6 and larger
L11          13 L6 AND LARGER

=> d l11 1-13 ibib abs

L11  ANSWER 1 OF 13  USPATFULL on STN
ACCESSION NUMBER:         2004:61037  USPATFULL
TITLE:                    Pharmaceutical delivery system for oral
                          inhalation through nebulization consisting of
                          inert substrate impregnated with substance (S) to be
                          solubilized or suspended prior to use
INVENTOR(S):              Hirsh, Jane, Wellesley, MA, UNITED STATES
                          Lo, Whe-Yong, Canton, MA, UNITED STATES
PATENT ASSIGNEE(S):       PEIRCE MANAGEMENT, LLC (U.S. corporation)

                               NUMBER        KIND    DATE
                          ---------------- ------ --------
PATENT INFORMATION:       US 2004045546      A1   20040311
APPLICATION INFO.:        US 2002-242803     A1   20020905  (10)
DOCUMENT TYPE:            Utility
FILE SEGMENT:             APPLICATION
LEGAL REPRESENTATIVE:     PATREA L. PABST, HOLLAND & KNIGHT LLP, SUITE 2000, ONE
                          ATLANTIC CENTER, 1201 WEST PEACHTREE STREET, N.E.,
                          ATLANTA, GA, 30309-3400
NUMBER OF CLAIMS:         26
EXEMPLARY CLAIM:          1
NUMBER OF DRAWINGS:       1 Drawing Page(s)
LINE COUNT:               1315
AB      A pharmaceutical delivery system for oral inhalation is
        disclosed through nebulization consisting of an inert supporting
        material impregnated with or deposited with pharmaceutically active
        ingredient which must be solubilized or suspended in a pharmaceutical
        solvent to form a solution or suspension prior to administration. Each
        pharmaceutical delivery unit dosage form comprises one or more
        therapeutically effective and safe amounts of pharmaceutically active
        ingredient uniformly impregnated in or deposited on a supporting
        material which is a natural or synthetic polymer, woven or non-woven
        fabrics, inert paper, inorganic materials such as foil and combination
        thereof in a single or multi-layer lamination in a form of a sheet or
        strip or film or membrane or sponge-like or cup or well. The dosage form
        of this invention is to be administered to a patient through oral or
        nasal inhalation using a nebulizer after reconstitution with a
        reconstituting solvent.


L11  ANSWER 2 OF 13  USPATFULL on STN
ACCESSION NUMBER:         2004:39365  USPATFULL
TITLE:                    Powder formulations containing
                          tiotropium suitable for inhalation
INVENTOR(S):              Banholzer, Rolf, Stuttgart, GERMANY, FEDERAL REPUBLIC
                          OF
                          Graulich, Manfred, Waldalgesheim, GERMANY, FEDERAL
                          REPUBLIC OF
                          Kulinna, Christian, Attenweiler, GERMANY, FEDERAL
```

REPUBLIC OF
Mathes, Andreas, Ockenheim, GERMANY, FEDERAL REPUBLIC OF
Meissner, Helmut, Ingelheim, GERMANY, FEDERAL REPUBLIC OF
Sieger, Peter, Mittelbiberach, GERMANY, FEDERAL REPUBLIC OF
Specht, Peter, Ober-Hilbersheim, GERMANY, FEDERAL REPUBLIC OF
Trunk, Michael Josef Friedrich, Ingelheim, GERMANY, FEDERAL REPUBLIC OF

PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004029907	A1	20040212
APPLICATION INFO.:	US 2003-406723	A1	20030403 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	EP 2002-7634	20020404

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 32
EXEMPLARY CLAIM: 1
LINE COUNT: 571
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of making a physically stable and homogenous **powdered** pharmaceutical composition comprising a **tiotropium** salt and a physiologically acceptable excipient, the method comprising:

(a) suspending the **tiotropium** salt and the physiologically acceptable excipient in a suspending agent in which the **tiotropium** salt and the physiologically acceptable excipient are essentially insoluble to obtain a suspension; and

(b) removing the suspending agent from the suspension of step (a) to obtain the pharmaceutical composition,

the pharmaceutical composition itself, and method of treating respiratory diseases, especially chronic obstructive pulmonary disease and asthma, in a patient in need thereof by administering an effective amount of the pharmaceutical composition to the patient.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 3 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2004:2487 USPATFULL
TITLE: Crystalline micronisate, process for the manufacture thereof and use thereof for the preparation of a medicament
INVENTOR(S): Bender, Helmut, Wiesbaden, GERMANY, FEDERAL REPUBLIC OF
Graebner, Hagen, Ingelheim, GERMANY, FEDERAL REPUBLIC OF
Schindler, Konrad, Ingelheim, GERMANY, FEDERAL REPUBLIC OF
Trunk, Michael, Ingelheim, GERMANY, FEDERAL REPUBLIC OF
Walz, Michael, Bingen, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma GmbH & Co. KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004002510	A1	20040101
APPLICATION INFO.:	US 2003-385175	A1	20030310 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2002-10212264	20020320
	US 2002-413129P	20020924 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P.·O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 880
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a crystalline micronisate of (1α,2β,4β,5α,7β)-7-[(hydroxydi-2-thienylacetyl)oxy]-9,9-dimethyl-3-oxa-9-azoniatricyclo[3.3.1.0.sup.2,4]nonane-bromide, processes for preparing it and its use for preparing a pharmaceutical composition, **particularly** for preparing a pharmaceutical composition with an **anticholinergic** activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 4 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:152386 USPATFULL
TITLE: Gastric retentive oral dosage form with restricted drug release in the lower gastrointestinal tract
INVENTOR(S): Berner, Bret, El Granada, CA, UNITED STATES
Louie-Helm, Jenny, Union City, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003104052	A1	20030605
APPLICATION INFO.:	US 2001-24932	A1	20011218 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-45816, filed on 25 Oct 2001, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: REED & EBERLE LLP, 800 MENLO AVENUE, SUITE 210, MENLO PARK, CA, 94025
NUMBER OF CLAIMS: 61
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 2156
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Controlled release oral dosage forms are provided for the continuous, sustained administration of a pharmacologically active agent to the upper gastrointestinal tract of a patient in whom the fed mode as been induced. The majority of the agent is delivered, on an extended release basis, to the stomach, duodenum and upper regions of the small intestine, with drug delivery in the lower gastrointestinal tract and colon substantially restricted. The dosage form comprises a matrix of a biocompatible, hydrophilic, erodible polymer with an active agent incorporated therein, wherein the polymer is one that both swells in the presence of water and gradually erodes over a time period of hours, with swelling and erosion commencing upon contact with gastric fluid, and drug release rate primarily controlled by erosion rate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 13 USPATFULL on STN

ACCESSION NUMBER: 2003:127712 USPATFULL
TITLE: Crystalline **anticholinergic**, processes for preparing it and its use for preparing a pharmaceutical composition
INVENTOR(S): Sieger, Peter, Mittelbiberach, GERMANY, FEDERAL REPUBLIC OF
Werthmann, Ulrike, Mittelbiberach, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003087927	A1	20030508
	US 6608055	B2	20030819
APPLICATION INFO.:	US 2002-167198	A1	20020611 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2001-129710	20010622
	DE 2002-10215436	20020408
	US 2001-313519P	20010820 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 701
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to crystalline anhydrous (1α,2β,4β,5α,7β)-7-[(hydroxydi-2-thienylacetyl)oxy]-9,9-dimethyl-3-oxa-9-azoniatricyclo[3.3.1.02.sup.2,4]nonane-bromide, processes for preparing it and its use for preparing a pharmaceutical composition, **particularly** for preparing a pharmaceutical composition with an **anticholinergic** activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:127094 USPATFULL
TITLE: Methods for identifying novel multimeric agents that modulate receptors
INVENTOR(S): Christensen, Burton G., Alamo, CA, UNITED STATES
Griffin, John H., Atherton, CA, UNITED STATES
Jenkins, Thomas E., La Honda, CA, UNITED STATES
Judice, J. Kevin, El Granada, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003087306	A1	20030508
APPLICATION INFO.:	US 2001-15534	A1	20011213 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2000-493462, filed on 28 Jan 2000, ABANDONED Continuation of Ser. No. US 1999-327904, filed on 8 Jun 1999, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-92938P	19980715 (60)
	US 1998-88466P	19980608 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: THERAVANCE, INC., 901 GATEWAY BOULEVARD, SOUTH SAN FRANCISCO, CA, 94080

NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 52 Drawing Page(s)
LINE COUNT: 8387
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed are novel multi-binding compounds (agents) which bind cellular receptors. The compounds of this invention comprise a plurality of ligands each of which can bind to such cellular receptors thereby modulating the biological processes/functions thereof. Each of the ligands is covalently attached to a linker or linkers which may be the same of different to provide for the multi-binding compound. The linker is selected such that the multi-binding compound so constructed demonstrates increased modulation or disruption of the biological processes/functions of the cell. Also disclosed is a method for identifying such novel multi-binding compounds which bind cellular receptors and a method for generating a mixture of such novel multi-binding compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:103784 USPATFULL
TITLE: Capsules containing **inhalable** **tiotropium**
INVENTOR(S): Hochrainer, Dieter, Bingen, GERMANY, FEDERAL REPUBLIC OF
Bechtold-Peters, Karoline, Biberach-Rissegg, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003070679	A1	20030417
APPLICATION INFO.:	US 2002-159451	A1	20020531 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2001-126924	20010601
	US 2001-304288P	20010709 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Page(s)
LINE COUNT: 834
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to capsules for **inhalation** (**inhalettes**) made from specific capsule materials with a reduced moisture content, which contain the active substance **tiotropium** in the form of **powdered** preparations and are characterised by increased stability.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:99174 USPATFULL
TITLE: Process for preparing **inhalable** **powders**
INVENTOR(S): Boeck, Georg, Mainz, GERMANY, FEDERAL REPUBLIC OF
Walz, Michael, Bingen, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY,

FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003068278	A1	20030410
APPLICATION INFO.:	US 2002-225781	A1	20020822 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2001-DE141376	20010823

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 685
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a new process for producing **powdered** preparations for **inhalation** comprising a substance having a smaller **particle size** distribution and a substance having a **larger particle size** distribution, wherein a substance having a smaller **particle size** distribution and a substance having a **larger particle size** distribution are continuously metered into a suitable mixing container such that the quotient N of the delivery speed for the metering of the substance having the smaller **particle size** distribution and the delivery speed for the metering of the substance having the **larger particle size** distribution is at least as great as the quotient M of the total mass of the substance having the smaller **particle size** distribution and the total mass of the substance having the **larger particle size** distribution.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:63569 USPATFULL
TITLE: Sprinkling method for preparing **powder** formulations
INVENTOR(S): Boeck, Georg, Mainz, GERMANY, FEDERAL REPUBLIC OF
Walz, Michael, Bingen, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF, D-55216 (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003043687	A1	20030306
APPLICATION INFO.:	US 2002-226062	A1	20020822 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2001-141377	20010823

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 635

AB The invention relates to a new process for producing **powdered** preparations for **inhalation** wherein a substance having a smaller **particle size** distribution is metered

continuously through a suitable feed device onto a moving bed of a **powdered** substance having a **larger particle size** distribution.

L11 ANSWER 10 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2003:17922 USPATFULL
TITLE: Combination of an adenosine A2A-receptor agonist and **tiotropium** or a derivative thereof for treating obstructive airways and other inflammatory diseases
INVENTOR(S): Yeadon, Michael, Sandwich, UNITED KINGDOM
Watson, John W., Ledyard, CT, UNITED STATES
Armstrong, Roison Anne, Mystic, CT, UNITED STATES
PATENT ASSIGNEE(S): Boehringer Ingelheim Pharma KG, Ingelheim, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003013675	A1	20030116
APPLICATION INFO.:	US 2002-154561	A1	20020524 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-293530P	20010525 (60)
	US 2001-303934P	20010709 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
LINE COUNT: 4413
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A combination of therapeutic agents useful in the treatment of obstructive airways and other inflammatory diseases comprising (i) an adenosine A.sub.2A receptor agonist; and (ii) an anti-cholinergic agent, preferably comprising a member selected from the group consisting of **tiotropium** and derivatives thereof; the combination being therapeutically effective in the treatment of the diseases when administered by **inhalation**; as well as to a method of treating the obstructive airways and other inflammatory diseases comprising administering separately, simultaneously or sequentially to the mammal by **inhalation** a therapeutically effective amount of the combination of therapeutic agents; as well as to a pharmaceutical composition comprising a pharmaceutically acceptable carrier together with the combination of therapeutic agents; as well as to a product containing the compounds of the combination for separate, simultaneous or sequential administration by **inhalation** to a mammal for the treatment of obstructive airways and other inflammatory diseases. It is preferred that the anti-cholinergic agent component be **tiotropium** bromide.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 11 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2002:205842 USPATFULL
TITLE: **Inhalable powder** containing **tiotropium**
INVENTOR(S): Bechtold-Peters, Karoline, Biberach, GERMANY, FEDERAL REPUBLIC OF
Walz, Michael, Bingen, GERMANY, FEDERAL REPUBLIC OF
Boeck, Georg, Mainz, GERMANY, FEDERAL REPUBLIC OF
Doerr, Rolf, Ober-Olm, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002110529	A1	20020815
APPLICATION INFO.:	US 2001-975418	A1	20011011 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2000-DE10050635	20001012
	US 2000-252683P	20001122 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 561
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to **powdered** preparations containing **tiotropium** for **inhalation**, processes for preparing them as well as their use in preparing a pharmaceutical composition for the treatment of respiratory complaints, **particularly** for the treatment of COPD (chronic obstructive pulmonary disease) and asthma.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 12 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2002:198239 USPATFULL
TITLE: Process for preparing **powder** formulations
INVENTOR(S): Walz, Michael, Bingen, GERMANY, FEDERAL REPUBLIC OF
Boeck, Georg, Mainz, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002106332	A1	20020808
	US 6585959	B2	20030701
APPLICATION INFO.:	US 2001-977911	A1	20011011 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2000-DE10050635	20001012
	DE 2001-DE138022	20010810
	US 2000-252683P	20001122 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOEHRINGER INGELHEIM CORPORATION, 900 RIDGEBURY ROAD, P. O. BOX 368, RIDGEFIELD, CT, 06877
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 650
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a new process for producing **powdered** preparations for **inhalation**.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 13 OF 13 USPATFULL on STN
ACCESSION NUMBER: 2001:75378 USPATFULL
TITLE: Methods and compositions for the prevention of tolerance to medications
INVENTOR(S): Ahmed, Tahir, Coral Gables, FL, United States
PATENT ASSIGNEE(S): Baker Norton Pharmaceuticals, Inc., Miami, FL, United States (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 6235725	B1	20010522
APPLICATION INFO.:	US 1999-362540		19990728 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-106507P	19981030 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Peselev, Elli
LEGAL REPRESENTATIVE: Levi-Minzi, Simona A.
NUMBER OF CLAIMS: 35
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 985
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to the identification of moieties and methods of using the same for preventing tolerance to bronchodilators. More specifically, the present invention pertains to the identification of compositions and methods which are capable of preventing tolerance to β.sub.2 -adrenergic agonists. The methods and compositions according to the invention are also useful as analytical tools for functional studies and as combination therapeutic tools.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> SET NOTICE DISPLAY 1

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> set auhelp off; set smart off; set msteps off; set expand cont; set audit off; del sel y

SET COMMAND COMPLETED

SET COMMAND COMPLETED

SET COMMAND COMPLETED

SET COMMAND COMPLETED

SET COMMAND COMPLETED

=> FILE CAPLUS,WPINDEX

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	131.23	131.44

FILE 'CAPLUS' ENTERED AT 19:04:38 ON 27 APR 2004

FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE COVERS 1907 - 27 Apr 2004 VOL 140 ISS 18
FILE LAST UPDATED: 26 Apr 2004 (20040426/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S US 2003043687/PN,APPS

```
             1 US 2003043687/PN
               (US2003043687/PN)
             0 US 2003043687/AP
             0 US 2003043687/PRN
             0 US 2003043687/APPS
               (US 2003043687/AP,PRN)
L12          1 US 2003043687/PN,APPS
```

=> FILE INPADOC

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.89	137.33

FILE 'INPADOC' ENTERED AT 19:04:42 ON 27 APR 2004
COPYRIGHT (C) 2004 European Patent Office, Vienna (EPO)

FILE LAST UPDATED:	22 APR 2004	<20040422/UP>
	22 APR 2004	<20040422/UPLS>
MOST RECENT INPADOC WEEK:	200417	<200417/EW>

FILE COVERS 1968 TO DATE.

LEGAL STATUS REBUILD ---> SEE NEWS OR
http://www.stn-international.de/stndatabases/details/LSR.pdf

>>> FOR STATISTIC OF CURRENT WEEK'S NEW ENTRIES, ENTER HELP UPS <<<

>>> STATISTIC FOR UPDATES OF PUBLICATION/PATENT KIND CODES
A. SORTED BY COUNTRY:
http://www.stn-international.de/stndatabases/details/inpadoc/fkd1
B. SORTED BY DATE:
http://www.stn-international.de/stndatabases/details/inpadoc/fkd2
<<<

>>> THE BASIC INDEX NOW CONTAINS SINGLE TERMS FROM THE TITLE (/TI) AND ABSTRACT FIELDS (/AB) AND ALLOWS SIMULTANEOUS LEFT AND RIGHT TRUNCATION (SLART) <<<

>>> FOR CHANGES IN INPADOC ---> SEE HELP CHANGE
(LAST UPDATED FEB 3, 2004) <<<

```
=> TRA L12 PN

L13          TRANSFER L12 1- PN :        3 TERMS
L14           3 L13

=>

=>  S L14 AND US/PC

       3843087 US/PC
L15           1 L14 AND US/PC

=>  SEL PN

E1 THROUGH E1 ASSIGNED

=>  S L14 AND ZA/PC

        193467 ZA/PC
L16           0 L14 AND ZA/PC

=>  SEL PN

L16 HAS NO ANSWERS

=>  S L14 AND EP/PC AND EN/LA

       1413170 EP/PC
       2252040 EN/LA
L17           0 L14 AND EP/PC AND EN/LA

=>  SEL PN

L17 HAS NO ANSWERS

=>  S L14 AND WO/PC AND EN/LA

        859471 WO/PC
       2252040 EN/LA
L18           0 L14 AND WO/PC AND EN/LA

=>  SEL PN

L18 HAS NO ANSWERS

=>  S L14 AND AU/PC

        792457 AU/PC
L19           0 L14 AND AU/PC

=>  SEL PN

L19 HAS NO ANSWERS

=>  S L14 AND CA/PC AND EN/LA

        856746 CA/PC
       2252040 EN/LA
L20           0 L14 AND CA/PC AND EN/LA

=>  SEL PN

L20 HAS NO ANSWERS
```

=> D SELECT

E1 1 US2003043687/PN

=>
Do you want to retrieve bibliographic & abstract data for these patent numbers from the CAplus and WPINDEX files (Y/N)?

=> set auhelp login; set smart login; set msteps login; set expand login; set audit login

SET COMMAND COMPLETED

SET COMMAND COMPLETED

SET COMMAND COMPLETED

SET COMMAND COMPLETED

SET COMMAND COMPLETED

=> SET NOTICE LOGIN DISPLAY

NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED